Design and reengineer metadata with the help of business process modelling

Gábor Horváth

We discussed the major issues of Metadata Repositories from a business process modelling point of view earlier [1]. The "Managed Metadata Environment" approach as an important mind shift supports the modelling framework we suggested.

Here we would like to investigate design and redesign issues related to the content of Metadata Repositories, namely metadata itself. Using the goal-oriented process modelling framework, teleonics, we discuss the why and what behind the main processes of the metadata lifecycle: design, collection, storage, maintenance and application. Industrial best practices are also visited and integrated into the language and view of the teleonic approach, in order to prove the usefulness of the application of a general system thinking methodology to our study.

Our main area of interest, international statistical data and metadata exchange programs provide an excellent opportunity to examine the upcoming international standard of the field: SDMX [2], which is supported by the major European and international organisations. The current purpose of the research is to complete the teleonic model of the exchange of time series data and their corresponding metadata based on SDMX. This includes the study of the key teleonic views: environment, goals, processes plus the data involved in the data exchange. An example of challenging and changing currently supported metadata will be discussed by the model together with the details of possible future solutions.

References

[1] G. Horvath. Teleonics in BP modelling and IT system design, accepted for publication, 2005

[2] SDMX - Statistical Data and Metadata Exchange, http://www.sdmx.org